

**Math 132-01-093****I. Contact Information**

Dr. Brent Strunk

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AIRW 351

Office Hour 1-2 M,R Airw 351, 1:30-2:30 W MRC, 5-7 R MRC

**II. Course Prerequisites/Corequisites**

Grade of "C" or better in MATH 131.

**III. Course Description**

Inverse functions, techniques of integration, applications of the integral, sequences and series.

**IV. Course Objectives and Outcomes**

Students finishing this course will have a working knowledge of techniques used to solve definite and indefinite integrals, approximate indefinite integrals, find volumes of revolutions, approximate summations, determine when a summation converges, and represent differentiable functions as power series.

**V. Course Topics**

We will cover additional techniques of integrations such as: Differentiation by Parts, Partial Fractions, Trig. Substitution. We will study the area between two curves, and the disk and shell methods for determining volumes of revolution. The course will finish with a study of tests of convergence for series and approximation of a function by Taylor and MacLauren series.

**VI. Instructional Methods and Activities**

This course will consist of daily lectures, regular quizzes, collected homework, Worksheets, collected periodically. 3 tests, and a final exam. The grade breakdown is as follows:

Homework: 50 points

Calculus I Review worksheet: 25 points

Maple Assignments: 25 Points

Quizzes: 100 points

Tests: 3 Exams @ 100 points

Final Exam: 200 points.

**VII. Evaluation and Grade Assignment**

The grading scale is as follows:

A: 700-630

B: 629-560

C: 559-490

D: 489-420

F: 419-0

*Undergraduate mid-term grades will be posted on-line for students to view via Arrow. Mid-term grades indicate a student's status at mid-semester only and do not indicate the final performance outcome of a student.*

**VIII. Class Policies and Procedures**

At a minimum, all policies stated in the current ULM *Student Policy Manual & Organizational Handbook* should be followed (see <http://www.ulm.edu/studentpolicy/>). Additional class policies include:

**A. Textbook(s) and Materials:** Stewart's Single Variable Calculus Concepts and Contexts, 3<sup>rd</sup> edition, and a graphing calculator.

**B. Attendance Policy:** Attendance will be taken daily.

**C. Make-up Policy:** If you miss a test, I will use your final exam score to assign you a grade for that test. This only applies to those who did not take a test, not to those who are dissatisfied with a test score.

Late homework is not accepted, and there are no make up quizzes. A small number of homework and quizzes will be dropped before final computation of your grade to account for this.

- D. Academic Integrity:** Faculty and students must observe the ULM published policy on Academic Dishonesty (see Page 4 in ULM *Student Policy Manual* -- <http://www.ulm.edu/studentpolicy/>). (Also, include any additional policy information.)
- E. Course Evaluation Policy:** At a minimum, students are expected to complete the on-line course evaluation. (Also, include any additional course-specific policies related to evaluation of the course.)
- F. Student Services:** Information about ULM student services, such as Student Success Center (<http://www.ulm.edu/cass/>), Counseling Center (<http://www.ulm.edu/counselingcenter/>), Special Needs (<http://www.ulm.edu/counselingcenter/special.htm>), and Student Health Services, is available at the following Student Services web site <http://www.ulm.edu/studentaffairs/>.
- G. Emergency Procedures:** In event of emergency, contact the instructor by email or phone as soon as possible.
- H. Email Policy:** Poor email etiquette reflects poorly on you. *Emails addressed to the professor must include an appropriate subject line, salutation, and signature.* Unsigned emails will result in a loss of 1 point per email from your final grade total. Demands made by email will be disregarded. Requests made by email will be handled fairly and promptly.

## IX. Tentative Course Schedule

### A. Contact Information:

Dr. Brent Strunk  
318-342-1851  
Airw 351  
strunk@ulm.edu

### B. Schedule: *The instructor reserves the right to adjust the schedule as needed.*

**Exam 1 Sept 24th**

**Exam 2 Oct. 15th**

**Exam 3 Dec. 1st**

**Final Exam: Dec 7<sup>th</sup> 8-10am**

### Assignments:

Problems listed in **bold** will be collected on a regular basis:

**5.5: 14, 21, 27, 37, 45, 53;** 4, 5, 14, 18, 21, 27, 30, 38, 45, 47, 53 **(2 days)**

**5.6: 2,4,9,14,23,25,44abd;** 2,4,9,14,18,21,23,25,34,37,41,44,46 **(2 days)**

**5.7: Integration Techniques (6 days)**

**Trigonometric Integrals Handout: 1,10,15,29,38;** 1,10,11,15,23,26,29,38,41

**Trigonometric Substitution Handout: 1,7,11,27,30;** 1,5,6,7,11,17,21,27,30

**Partial Fraction Appendix: 1a,8,9,15,35;** 1a,5,6b,8,9,15,19,29,35

**Strategies Handout: 1,8,11,13,15,17;** 1,5,7,8,11-13,15-19,21,22,25,27,37,42,43

**5.9: 1,7,13,18,27,38;** 1,7,13,18,20,21,27,29,31,37,38,39 **(1 days)**

**5.10: 1,8,14,25,44,47,53;** 1,3,8,14,17,25,29,43,44,46,47,53,57,62 **(2 days)**

**6.1: 1,3,8,14,21,22;** 1,3,8,11,14,16,21,22,25,39 **(2 days)**

**6.2: 2,7,11,22,23,27,29,32;** 2,7,11,21,22,23,24,27,29,32,39,42,49 **(2 days)**

**6.3: 1,6,9,19,23;** 1,6,8,9,12,19,23,25,26 **(1 days)**

**6.4: 1,8,11,13,15;** 1,4,8,11,13,15,18 **(1 days)**

**6.5: 2,3,6,16,21;** 2,3,6,11,16,19,21,23,30,37 **(2 days)**

**6.6: 2,8,13,16;** 2,5,8,12,13,16 **(1 day)**

**8.1: 1,2,5,21,28,33,44,47;** 1,2,5,11,21,28,33,35,37,39,44,46,47 **(2 days)**

**8.2: 1,2,4,9,18,27,33,36,44,55;** 1,2,4,6,9,18,24,27,30,33,36,42,44,49,55 **(2 days)**

**8.3: 1,3,4,13,17,21,28,32,34;** 1,3,4,5,9,13,16,17,18,21,22,25,27,28,32,34 **(2 days)**

**8.4: 1,8,10,16;** 1,2,3,6,8,10,11,16,18,19,22,25,31,33 **(2 days)**

**8.5: 1,2,7,8,10,18,20,22,25;** 1,2,7,8,9,10,18,20,22,23,25,27 **(2 days)**

**8.6: 1,4,8,12,18,22,33;** 1,4,7,8,12,18,22,24,28,30,33,36 **(2 days)**

**8.7: 2,7,15,22,27,33,42;** 2,6,7,8,12,15,22,26,27,33,37,42,44,54 **(3 days)**

**8.8: 2,8,13;** 2,4,6,8,10,13 **(? days)**

**8.9: 1,8,15,16,17,21,25,27;** 1,5,8,15,16,17,19,21,25,27,29 **(2 days)**

	Mon	Tues	Wed	Thurs
<b>Aug</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>
<b>132</b>	5.5	5.5	5.6	5.6
<b>Sept</b>	<b>31</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>132</b>	Maple 1 and 2	5.7	5.7	5.7
	7	8	9	10
<b>132</b>	Labor Day	5.7	5.7	5.7
	14	15	16	17
<b>132</b>	Extra Int.	5.9	5.10	5.10
	21	22	23	Last "W" 24
<b>132</b>	Maple 3a	6.1	Review	<b>Exam 1</b>
<b>Oct</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>1</b>
<b>132</b>	6.1	6.2	6.2	6.3
	<b>Midterm 5</b>	<b>Midterm 6</b>	<b>Midterm 7</b>	<b>Midterm 8</b>
<b>132</b>	6.3	6.4	6.5	6.5
	<b>Midterm 12</b>	<b>Midterm 13</b>	<b>Midterm 14</b>	<b>Midterm 15</b>
<b>132</b>	6.6	Extra Story	Review	<b>Exam 2</b>
	19	20	21	22
<b>132</b>	Maple 3b	8.1	Maple 4	8.2
	26	27	28	29
<b>132</b>	Fall Break	8.2	8.3	8.3
<b>Nov</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>132</b>	8.4	8.4	Extra Conv.	Maple 5
	9	10	11	12
<b>132</b>	8.5	8.5	8.6	8.6
	16	17	18	19
<b>132</b>	8.7	8.7	8.7	Maple 6
	23	24	25	26
<b>132</b>	8.8	8.9	No Class	Thanksgiving
<b>Dec</b>	<b>30</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>132</b>	Review	<b>Exam 3</b>	Review	Review